

SAZYKIN, Yu.O.; BORISOVA, G.N.

Action of antibiotics from the neomycin group on the penetration of metabolites into the microbial cells. Antibiotiki 6 no.8: 710-714 Ag '61. (MIRA 15:6)

1. Laboratoriya biokhimii Instituta khimii prirodnikh soyedineniy AN SSSR.
(NEOMYCIN) (DEHYDROGENASE) (ESCHERICHIA COLI)

SAZYKIN, Yu.O.; BORISOVA, G.N.

Study of the action of a new antifungal substance, the methyl ester of 4-keto-5-decynoic acid, on the metabolism of *C. albicans* and *S. cerevisiae*. Antibiotiki 8 no.8:717-723 Ag '63.

(MIRA 17:5)

1. Laboratoriya biokhimii Instituta khimii prirodnikh soyedineniy AN SSSR.

NOVIKOVA, M. A.; RYABOVA, I. D.; CHESTUKHIN, A. V.; BORISOVA, G. N.; ZHDANOV, G. L.

"Investigation of influence of some antibiotics and their analogs on induced synthesis in bacteria."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

Inst for Chemistry of Natural Compounds, AS USSR, Moscow.

1ST AND 2ND ORDERS		PROCESSES AND PROPERTIES INDEX	
<p>CA</p> <p>Kinetics of catalytic cracking of paraffin over activated aluminum silicate. P. K. Mankash, G. P. Borisova, D. I. Orshko, and A. V. Frost. <i>Neftyanoe Khoz.</i> 24, No. 6/7, 2631(1960). The cracking of wax (a Fischer-Tropsch product m. 28-32° and with mol. wt. 320) in a reaction tube packed with activated aluminum silicate catalyst conforms closely to equations for a unimol., consecutive reaction. The velocity const. slightly decreases at low feed rates. The apparent energy of activation, calcd. from these equations, is 13,500 for the overall decompn. of the feed, 10,400 for the decompn. of cracked gasoline, 11,000 for the formation of gasoline and 15,000 cal./mol. for the decompn. of the residue recycled to the second pass. The difference in the values for decompn. and formation of gasoline explains why max. yield of gasoline is lower with increase in temp. Formulas are derived for calcg. the velocity const. of catalytic cracking as a function of temp. Calcd. data on the yield of products and the optimal volumetric velocity corresponding to max. gasoline yield are tabulated along with exptl. values. They agree fairly well with each other. B. C. M.</p>		<p>2 2</p>	
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>FROM SYMBOLISM</p>		<p>RELATIONSHIP</p>	
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15.9130

676.34

SOV/81-59-14-51894

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 14, p 556 (USSR)

AUTHORS: Blokh, G.A., Borisova, G.S., Burmistrov, S.I., Prznebylskiy, M.I.

TITLE: Technological Investigations of Some Organic Compounds as Accelerators for the Vulcanization of Dipped Products

PERIODICAL: Tr. Dnepropetr. khim.-tekhnol. in-t, 1958, Nr 6, pp 166 - 173

ABSTRACT: The action of the following compounds as accelerators of the process of sulfur vulcanization at 100 - 120°C was investigated: trithiane $\overline{\text{CH}_2\text{SCH}_2\text{SCH}_2\text{S}}$ (I), triisopentoxythiophosphate $[(\text{C}_2\text{H}_5)_2\text{CHO}] \text{P} = \text{S}$ (II), diethoxydithiophosphoric acid $(\text{C}_2\text{H}_5\text{O})_2\text{P}(\text{S}) \text{SH}$ (III), and its salts (IV), the diethyl ester of the 2-ethylmercaptoethanethiophosphoric acid $(\text{C}_2\text{H}_5\text{O})_2\text{P}(\text{S})\text{CH}_2\text{CH}_2\text{SC}_2\text{H}_5$ (V), dibenzylthiourea $(\text{C}_6\text{H}_5\text{CH}_2\text{NH})_2\text{CS}$ (VI), the benzthiazole ester of the diethyldithiocarbamic acid (VII), benzylammonium dithiocarbamate $\text{C}_6\text{H}_5\text{CH}_2\text{NHC}(\text{S})\text{SHNH}_2\text{CH}_2\text{C}_6\text{H}_5$ (VIII), hexamethyleneimine hexamethylenedithiocarbamate $(\text{CH}_2)_6\text{HC}(\text{S})\text{SN}\cdot\text{NH}(\text{CH}_2)_6$ (IX). The compounds I-VI and VIII have no accelerating action. VII produces opaque films with good physical-chemical properties, IX is an accelerator which has been introduced

Card 1/2

67634

SOV/81-59-14-51894

Technological Investigations of Some Organic Compounds as Accelerators for the
Vulcanization of Dipped Products

into production and shows transparent highly-stable films.⁵ The films were obtained
by dipping into a standard glue with S and later on into a glue with the accelerator
or into a toluene solution of the accelerator. The glue with IX is stable on storing
for two weeks. Analogous results were obtained also in press vulcanization. 4

V. Kuleznev

Card 2/2

BLOKH, G.A.; BORISOVA, G.S.; PRZHEBYL'SKIY, M.I.

Thermal activation of the ingredients of rubber stocks.

Trudy DKHTI no.6:174-184 ' 58.

(MIRA 13:11)

(Rubber)

BORISOV, G.V., Cand Med Sci —(disc) "Pathological anatomy of listeriosis in experimental animals." Tomsk, 1959. 13 pp (From the Chair of Pathological Anatomy of ~~the~~ Tomsk State Med Inst and from the Scientific Research Inst of Vaccines and Sera of the Min of Health USSR), 200 copies (KL,32-59, 105)

-36-

SOKOLOVA, N.V.; KAMNEVA, T.G.; BORISOVA, G.V.; ZVEREV, S.M.;
MALYSHEVA, N.M.

Neoplastic diseases according to autopsy data in Tomsk for the
past 20 years (1938-1956). Vop.onk. 7 no.3:80-83 '61.

(MIRA 14:5)

(TOMSK—TUMORS)

NOVITSKIY, K.Yu.; YUR'YEV, Yu.K.; OLYNIA, A.F.; BORISOVA, G.V.

Furan series. Part 35: Syntheses based on 5-methyl-2-bromoacetyl furan.
Zhur.org.khim. 1 no.2:386-388 P '65.

(MIRA 18:4)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

BORISOVA, I.

"A first-class craftsman."

So. Radio, Vol. 3, p. 8, 1952

BORISOVA, I.

USSR/Electronics - Television
Committees, Dosaaf

Aug 52

"The Radio Amateurs of Noginsk," I. Borisova

"Radio" No 8, pp 14-16

Gives the staff of the Noginsk City Dosaaf Committee. Describes television receivers, magnetic recorders, etc., designed by the Radio Amateur Activity Section of the above committee. The section has 135 members. Mentions that there are now more than 200 television receivers in Noginsk, but there are no radio repair shops.

226120

BORISOVA, I.

"A highly-skilled radio amateur."

So. Radio, vol. 9, p. 13, 1952

BORISOVA, I.

Radio Operators

Attaining the rank of amateur radio operator. Radio No. 5, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

BORISOVA, I.

~~CONFIDENTIAL~~
Activists of the All-Union Volunteer Society for Assistance to the Army,
Aviation, and Navy. Radio no.6:8-9 Je '53. (MLRA 6:6)
(Radio operators)

BORISOVA I.

USSR/Miscellaneous - Radio amateurs

Card : 1/1 Pub. 89 - 6/24

Authors : Borisova, I.

Title : Junior radio amateurs

Periodical : Radio 6, 10 - 11, June 6, 1954

Abstract : Considering the value of radio for the technical progress of the USSR, the official Soviet organizations endeavor to make the population radio-minded through amateur club organizations. The Soviet youth is drawn into amateur radio work from their first school years on. Examples of activities of Junior radio-amateur groups are illustrated.

Institution : ...

Submitted : ...

BORISOVA, I.

USSR/ Electronics - Book review

Card 1/1 Pub. 89 - 28/29

Authors : Borisova, I.

Title : Notes about a book

Periodical : Radio 9, 62-63, Sep 1954

Abstract : A book on radio, written by a high school teacher of physics, is appraised. The book entitled "Radio in the School", describes the students' activities of one of the Moscow high schools in the field of radio. The author finds the book to be of wide interest to radio-amateur students of Soviet high schools.

Institution : ...

Submitted : ...

BORISOVA, I.

USSR/ Miscellaneous - Book review

Card 1/1 Pub. 89 - 29/32

Authors : Borisova, I.

Title : The champion of high-speed radio reception

Periodical : Radio 2, page 60, Feb 1955

Abstract : A review is presented of V. Uspenskiy's book, "The Champion of High-speed Reception," published by DOSAAF. The book presents a biography of Fedor Vasil'evich Roslyakov, and describes his activities and achievements in the field of radio communications.

Institution:

Submitted:

BORISOVA, I

USSR/ Electronics - Personnel training

Card 1/1 Pub. 89 - 10/30

Authors : Borisova, I.

Title : Future radio engineers

Periodical : Radio 3, 18 - 19, Mar 1955

Abstract : A personality story is given of the life and activity of girls from various satellite countries who are studying to be specialists in the technology of communication, radio and television at the Moscow Electro-technical Institute. Illustrations.

Institution :

Submitted :

BORISOVA, I.

The "people's laboratory" at work. Radio no.5:20-21 My'55.
(Amateur radio stations) (MLRA 8:6)

BORISOVA, I.

continued on next page

A much-needed book ("Soviet Radio." G.Kazakov. Reviewed by
I.Borisova) Radio no.7:63-64 J1'55. (MIRA 8:10)
(Radio) (Kazakov,G.)

BORISOVA, I.

IAnina Krasnova and her friends. Radio no.1:5-6' Ja '56.
(Radio industry) (MLRA 9:4)

BORISOVA, I. (Leningrad).

In a semiconductor plant. Radio no.11:6-7 N '56. (MLRA 9:12)
(Electronic calculating machines)

BORISOVA, I.

**First steps. Radio no.6:8-9 Je '56.
(Radio, Shortwave)**

(MLRA 9:8)

BORISOVA, I.; SVOREN', R.

A good beginning. Radio no.12:7-9 D '56.

(MLRA 10:2)

(Moscow--Radio clubs)

BORISOVA, I.

107-12-8/46

AUTHOR: Borisova, I. and Skvoren', R. (Moscow)

TITLE: Good Initiative (Khorosheye nachinaniye)

PERIODICAL: Radio, 1956, Nrl2, pp. 7-9 (USSR)

ABSTRACT: A report on the organization and activities of the new DOSAAF Radio Club of the Coke-Gas Plant, Moscow. The Chairman of the Club Council is engineer Viktor Valerianovich Gopko who graduated from the Institute of Steel in 1953. Gopko organized a "radio circle" at the plant where a number of plant workers studied the principles of electronics and radio amateur art. As a first result a number of efficiency devices were developed and put in operation at the plant. Nikolay Trubkin, technician, substituted electronic relays for electromagnetic ones on the feed-water supply to the steam boiler. Jointly with Gopko they developed an electronic feed-water controller.

"Ardent propagandists of radio knowledge" are: Pavel Petrovich Volkov, normalizer; I. Mishin; N. Mishchenkov; V. Filin; V. Mos'kin, gas welder; and others. The radio club has a classroom, a mechanical shop, a small electric shop, a stockroom, and a small technical reference library. There are 70 members of the club. Over 20 persons are constructing their own ultrashort-wave radio stations. V. Butyl'skiy, Chief Power Engineer of the plant, offered a specification of items whose improvement is desirable at the plant.

AVAILABLE: Library of Congress.

There 3 photos in the article.

Card 1/1

107-57-4-13/54

AUTHOR: Borisova, I.

TITLE: Why Do Radio Amateurs Get No Help in Babushkino? (Pochemu v g. Babushkino ne rabotayut s radiolyubitelyami?)

PERIODICAL: Radio, 1957, Nr 4, p 15 (USSR)

ABSTRACT: P. Rusinov, a radio amateur, Babushkino, Moscow Oblast, wrote a letter to the "Radio" journal, complaining about the lack of a radio club in Babushkino. The author visited Gundusov, Chairman of the Babushkino DOSAAF committee, and discussed the matter with him. There are sixty DOSAAF lower-level organizations in Babushkino with a total membership of over 9,000. There are many industrial enterprises, such as the plant imeni Dzerzhinskiy, the electrode factory, the ~~nicothe~~ factory, and others. There are many demobilized soldiers familiar with engineering, like Golovskoy, who was elected chairman of the DOSAAF committee recently, and Kashnitskiy, who supervises a radio group at Nr 2 High School (both members of the Communist Party). The author found Gundusov's explanations unsatisfactory and complains about them in the article.

Card 1/1

BORISOVA, I.

107-57-5-21/63

AUTHOR: Borisova, I.

TITLE: Broadcasts for Chinese Friends. The Whole World Listens to Moscow
(Peredachi dlya kitayskikh družey. Moskvu slushayet ves' mir)

PERIODICAL: Radio, 1957, Nr 5, p 16 (USSR)

ABSTRACT: Yun' Tsun'-Gou, Pekin, likes very much Moscow broadcasts for China.

The Chinese Editorial Office of the Moscow Radio has given 9,583 answers in writing or by radio to the letters of Chinese radio listeners for one year.

A diversified China-bound program is offered by the Moscow Radio: "Before the USSR Map" program describes Soviet Republics and cities, special reports are supplied about new construction projects, men of science and engineering speak at the microphone, literary and musical broadcasts are organized. Also moral qualities of Soviet people are described, life of Chinese students in the USSR is reported, and filling of Red China orders by Soviet industry is reported. Over 200 broadcasts of 1956 covered the "Soviet-Chinese friendship".

Three photos show small audiences of Moscow radio in East Germany, North Vietnam and Outer Mongolia.

AVAILABLE: Library of Congress

Card 1/1

AUTHOR: Borisova, I. SOV-107-58-9-6/38

TITLE: A Radio Operator in a Virgin Lands Settlement (Radistka
tselinnogo poselka)

PERIODICAL: Radio, 1958, Nr 9, pp 8 (USSR)

ABSTRACT: The article consists of extracts from the letters of Ne-
onila Khizhnyak, trained by the Groznyy Radioclub of the
DOSAAF, and sent together with other girls as radio oper-
ators to the virgin lands settlements in Kazakhstan.
There is 1 photo.

1. Radio operators--USSR

Card 1/1

AUTHOR: Borisova, I.

SOV/107-58-11-5/40

TITLE: Instruments Produced by Radio Amateurs of the Capital (Pri-
bory, sozdannyye radioyubitelyami stolitsy)

PERIODICAL: Radio, 1958, Nr 11, p 6 (USSR)

ABSTRACT: Lev Petrovich Shuvator, a member of the Moscow City DOSAAF Radio Club, has produced many devices which are being used in medical establishments. His miniature radio apparatus for registering certain physiological functions of small children carrying out physical exercises is being used in the Pediatric Institute of the RSFSR Health Ministry in Moscow. It is highly valued by the Director of the Institute, Candidate of Medical Sciences A.P. Chernikova, the Scientific Director Professor N.R. Shastin and the Head of the Physiological Department Doctor of Medical Sciences, N.Ye. Ozeretskovskaya. He was awarded author's certificate Nr 108311 by the Komitet po delam izobreteniy i otkrytiy pri Sovete Ministrov SSSR (Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR) for "A Means of Measuring the Pulse by Radio". This suggestion was recognized as an invention and included in the USSR State register of invention. At the 14th All-Union Exhibition of the Creative

Card 1/3

SOV/107-58-11-5/40

Instruments Produced by Radio Amateurs of the Capital

Work of Amateur Radio Designers of DOSAAF, Shuvatov demonstrated his three-tube ballisto-cardiograph. He also designed the following: 1) a recording densitometer with a photoelectronic multiplier; 2) a camera for recording galvanic reflexes; 3) a device for the simultaneous recording of both the sounds of the heart, and a ballisto-cardiogram; 4) a three-channel ballisto-cardiograph for simultaneously recording a ballisto-cardiogram, an electrocardiogram, and the sounds of the heart; 5) a piezometric pick-up for recording respiration during physical exercises; 6) a radio receiver for recording respiration; 7) a special semiconductor diode rectifier for electrophoresis, and many other devices. V. Larin received a 2nd class diploma at the 15th All-Union Exhibition, for his "correctophone" used to cure stammering. A device for rejecting defective spools, designed by Ya. Korytysskiy, I. Kornev and V. Korepin is now in use in the textile industry. Radio amateur N. Vostroknutov has developed a transistorized millisecond timer. D. Stepanov has designed a universal time relay. Several members

Card 2/3

SOV/107-58-11-5/40

Instruments Produced by Radio Amateurs of the Capital

of the Moscow City Radio Club have produced designs of instruments which are being used in various branches of science and engineering.

Card 3/3

AUTHOR: Borisova, I.

SOV/107-59-1-10/51

TITLE: The Communist Way of Life and Work (Zhit' i rabotat' po-kommunisticheski)

PERIODICAL: Radio, 1959, Nr 1, p 13 (USSR)

ABSTRACT: A group of female workers, members of the Komsomol, at the Moskovskiy zavod televizionnoy apparatury (Moscow Television Equipment Plant) accepted a socialist obligation to apply the "Communist Way of Life and Work". Most of them have graduated from the 10 year school. They all pledged, among other things, to have finished medium vocational education by 1963. There is one photo.

Card 1/1

6(4)

SOV/107-59-2-15/55

AUTHOR: Borisova, I.

TITLE: Students - Radio Amateurs (Studenty - radiolyubiteli)

PERIODICAL: Radio, 1959, Nr 2, p 16 (USSR)

ABSTRACT: The Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Bauman (the Moscow Technical College imeni Bauman), one of the biggest in the USSR, has 10,000 students, of whom 250 are radio amateurs--members of the college committee of the Moskovskiy gorodskoy radioklub DOSAAF (Moscow Radio Club of the DOSAAF) who operate short wave and ultra-short wave stations, experiment with radioelectronics, designing etc. Chairman of the DOSAAF Committee, Nikolay Pavlovich Zmiyev and his Deputy, Mikhail Yefimovich Vashchuk, are devoting much attention to their work with radio amateurs; highly qualified specialists, such as G.O. Kazanichev and V.S. Saprykin, Candidates of Technical Sciences, both employed with the Department of Radio Engineering, are acting as instructors. The short wave

Card 1/2

Students - Radio Amateurs

SOV/107-59-2-15/55

section is lead by Yu. Fadeyev, the ultra-short wave section by Gennadiy Orlov, both students of the institute. A student Vyacheslav Fedotov is developing a radioelectronic device to be used on caterpillar machines. Unfortunately the school administration does not support sufficiently the work of the DOSAAF. So far, the Director of the MVTU imeni Baumana - Professor D.A. Prokoshkin, Doctor of Technical Sciences has refused to see the Chairman of the DOSAAF Committee or to learn the needs and requirements of radio amateurs. There is 1 photograph.

Card 2/2

SOV/107-59-4-3/45

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AUTHOR: Borisova, I.

TITLE: A Book on Vladimir Il'ich (Kniga o Vladimire Il'iche)

PERIODICAL: Radio, 1959, Nr 4, p 3 (USSR) :

ABSTRACT: The author reviews the book "Lenin i radio" (Lenin and Radio) by A.M. Nikolayev, published by Gosudarstvennoye izdatel'stvo politicheskoy literatury, Moscow, 1958. There is 1 photograph. .

Card 1/1

BORISOVA, I.

Interest in radio should be awakened in women on a larger scale.
Radio no.3:8-9 Mr '60. (MIRA 13:6)
(Radio)

BORISOVA, I.

Lenin's role in the development of radio. Radio no.8:15 Ag
'60. (MIRA 13:9)

(Radio)

(Lenin, Vladimir Il'ich, 1870-1924)

BORISOVA, I.

This book should be read. Radio no.4:10 Ap '61. (MIRA 14:7)
(Phonorecorda) (Lenin, Vladimir Il'ich, 1870-1924)

BORISOVA, I.; KUNYAVSKIY, G., konstruktor

Bibliography. Radio no.3:63-64 Mr '62.
(Bibliography--Radio)

(MIRA 15:3)

BORISOVA, I.

"Radio-Electronics" by A.L. Mints. Reviewed by I. Borisova.
Radio no.6:63-64 Je '63. (MIRA 16:7)

(Radio) (Electronics) (Mints, A.L.)

BORISOVA, I.

In one of the radio clubs of Chirchik. Radio no. 710-7 '61.
(MIRA 1961)

BORISOVA, I.

Published for radio amateurs by the All-Union Volunteer Society
for Assistance to the Army, Air Force, and Navy. Radio no.10:18
'64. (MIRA 18:2)

BORISOVA, I.

Competition of the radio operators of the R.S.F.S.R.
Radio no.10:13 0 '65.

(MIRA 18:12)

BORISOVA, L. G.

Changes in the lipide metabolism and the activity of the lipoxidases as effected by ionizing irradiation. E. V. B. nitskaya, L. G. Borisova, and A. G. Pasynskii (A. N. Bakh Inst. Biochem., Acad. Sci. U.S.S.R., Moscow). *Biokhimiya* 21, 702-8(1958).—The effect of Röntgen rays were studied on the lipoxidase of soy flour and on linoleic acid and on carotene in pure form and in conjunction with the simultaneous oxidation of mixt. of linoleic acid and carotene. The inactivation (37%) dose for dry lipoxidase was $3.5-4 \times 10^4$ r. and in soln. 500,000 r. In soln. a 10% inactivation of lipoxidase occurred at $40-60 \times 10^4$ r. The oxidation of lipoxidase proceeded in the form of a single-act reaction. On the basis of the results of the radiation inactivation of lipoxidase the mol. wt. of this enzyme was calcd. to be 120,000. It was demonstrated in the case of linoleic acid irradiation that its presence with carotene enhanced the oxidation of the latter. The inactivation of the enzyme and the nonenzymic oxidation of the substrates of lipoxidase as a result of low-dose x-ray irradiation were of secondary significance in the changes of lipide metabolism. R. S. Levine

BORISOVA, I. G.

Effect of ionizing radiation on activity of lipoxidase of soybeans. B. V. Budnitskaya, I. G. Borisova, and A. G. Pasynskii (A. N. Bakh Biochem. Inst., Moscow). *Doklady Akad. Nauk S.S.S.R.* 110, 403-8 (1958). --Lipoxidase activity was detd. of soybeans treated with x-radiation in aq. soln. at various dilns. or in dry solid state with dosage up to 100,000 r. Activity declines logarithmically with dose of radiation. Thus, the inactivation appears to be a single-act phenomenon. Calcn. showed that the probable mol. wt. unit of the enzyme is 120,000, estd. from known d. and the extrapolated vol. of 1.58×10^{-19} ml. required per ionization phenomenon during the radiation; the value agrees rather well with centrifugal estn. of the mol. wt. (Holman, et al., *Advances in Enzymol.* 8, 425 (1948)). G. M. K.

3

BORISOVA, I.G.

SERENKOV, G.P.; PAKHOMOVA, M.V.; BORISOVA, I.G.

Comparative biochemical study of two species of green algae. Vest. Mosk.
un. Ser. biol., pochv., geol., geog. 12 no.3:77-85 '57. (MIRA 10:12)

1. Kafedra biokhimii rasteniy Moskovskogo gosudarstvennogo universiteta.
(ALGAE)

BUDNITSKAYA, E. V. and BORISOVA, I. G. (Moscow, USSR)

"Radiation Effect on teh Metabolism of the Lipids in Plants,"
paper submitted at IV Intl Cong on Biochemistry, 1 - 6 Sep 1958a, Vienna, Austria

BUDNITSKAYA, Ye.V., BORISOVA, I.G., PASYNSKIY, A.G.

Changes in the lipid metabolism of plants caused by ionizing
radiations [with summary in English]. Biokhimiia 23 no.6:849-855
M-D '58 (MIRA 11:12)

1. Institut biokhimiim imeni A.N. Bakha AN SSSR, Moskva.
(LIPID METABOLISM)
(PLANTS, EFFECT OF X RAYS ON)

SOV/20-120-1-38/63

AUTHORS: Budnitskaya, Ye. V., Borisova, I. G., Pasynskiy, A. G.

TITLE: The Influence of Ionising Radiations on the Activity of Lipoxidase in Seedlings of Various Plant Species (Deystviye ioniziruyushchikh izlucheniye na aktivnost' lipoksidazy v prorstkakh rasteniy razlichnykh vidov)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 120, Nr 1, pp.140-143 (USSR)

ABSTRACT: In earlier published papers (Refs 1, 7) the authors of this and other papers proved that lipoxidase is resistant against irradiation in vitro. In this paper the effect of x-ray irradiation in vivo on soy beans, peas, beans, (Phaseolus), wheat and maize is examined. The method of irradiation and examination of the mentioned activity is described. By means of the method described the dependence of lipoxidase activity in the leaves of seedlings of various plant species upon the dose of x-ray irradiation was determined. The activity in seedlings not irradiated was found to amount to 100 %. Results are shown in table 1. Herefrom it was possible to con-

Card 1/4

SOV/20-120-1-38/63

The Influence of Ionising Radiations on the Activity of Lipoxidase in Seedlings of Various Plant Species

clude that the lipoxidase of various plant species does not react in the same way when irradiated. Thus the irradiation of corn seedlings with 1000 to 50 000 r leads already 2 - 4 hours after irradiation to a slight decrease of activity; later (after 24 to 48 hours) there is a sudden drop. On the other hand, the lipoxidase of wheat, beans and soy beans is being "activated" by the same dose within 24 hours after irradiation. Similar results are known in the case of other ferments (Refs 3 - 5, 7 - 12). In order to be able to explain the activation mechanism of the lipoxidase the authors studied the permeability change of the plant tissue in radiation. In this connection the fact was taken into account that the increase of permeability may be coupled with the increase of the effective ferment amount (Refs 3 - 6). The method employed in this case is described (Ref 15). Results are shown in table 2. It follows that the increase of lipoxidase activity in the experiments in vivo takes a course similar to that of the modification of the relative permeability of the tissue. Finally, the chemical changes of the free lipides in the leaves during irradiation were examined. From table 3 it may

Card 2/4

SOV/20-120-1-38/63

The Influence of Ionising Radiations on the Activity of Lipoxidase in
Seedlings of Various Plant Species

be seen that in the fraction of free lipides the irradiated bean leaves contain 6 times as many peroxides as the leaves which were not irradiated. Irradiation in vivo requires much smaller doses to show changes in the lipoxidase system than the experiment in vitro. The occurrence of an activation phase of the ferment system in the case of not very high doses and of incubation of short duration is typical of experiments in vivo. The change of the relative permeability of the seedling leaves (Table 2) shows that during the ionizing irradiation a disturbance of the inner cellular structure takes place, which facilitates a washing out of electrolytes into the outer milieu (zones). This probably explains the changes in lipoxidase activity. There are 3 tables and 23 references, 13 of which are Soviet.

ASSOCIATION: Institut biokhimii im. A. N. Bakha Akademii nauk SSSR
(Institute of Biochemistry imeni A. N. Bakh, AS USSR)

Card 3/4

SOV/20-120-1-38/63
The Influence of Ionising Radiations on the Activity of Lipoxidase in
Seedlings of Various Plant Species

PRESENTED: January 3, 1958, by A. I. Oparin, Member, Academy of Sciences,
USSR

SUBMITTED: January 2, 1958

1. Phospholipids--Chemical reaction
2. Seeds--Test methods
3. X-rays--Biochemical effects

Card 4/4

.17(4,10)

SOV/20-126-1-53/62

AUTHORS:

Budnitskaya, Ye. V., Borisova, I. G.

TITLE:

Fermentative Oxidation of Lipids in Plants Exposed to Ionizing Radiation (Fermentativnoye okisleniye lipidov rasteniy pri deystvii ioniziruyushchey radiatsii)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 1, pp 195-197 (USSR)

ABSTRACT:

Lipids, besides proteins of desoxical and ribonucleic acid as well as the specific polysaccharides determine the hereditary properties of the organism (Refs 1,2). Although the influence of radiation on the metabolism of lipids is of essential interest, publications on this problem are few in number. The conjugate oxidation of carotene is intensified, if linolemic acid and carotene are exposed to radiation in vitro (Ref 3). The fermentative system usually oxidized by the unsaturated fatty acid - lipoxidase - is resistant to radiation in tests in vitro (Refs 3,4), but increases its activity in tests in vivo, as a rule in leaves treated with radiation by 30-50% within the first 24 hours (Refs 5-7). This increase of activity takes place in analogy with the changes of the relative per-

Card 1/4

SOV/20-126-1-53/62

Fermentative Oxidation of Lipids in Plants Exposed to Ionizing Radiation

meability of the plant texture exposed to radiation. In bean leaves treated with radiation a much larger proportion of peroxide in the fraction of free lipids was found than in those not treated (Ref 8). The authors have now continued to study the influence of X-rays on the change of the existence of free lipids in different kinds of plants, furthermore they investigated the fermentative nature of the formation of peroxides in leaves, caused by ionizing radiation. 10- to 14-day old seedlings of French beans of the type "Latviya" and of barley called "Wiener" were treated with rays. The intensity of radiation amounted to 595 r/min. After 24 hours they were lyophilically dried. The method of isolating the lipids was applied in a somewhat modified way according to reference 9. According to reference 10 peroxides were found in free and compound lipids. From the dates given in table 1 can be seen that considerable changes take place at 1000-10000 r: the fraction of free lipids contains two to six times as many peroxides in leaves treated with radiation, than in other leaves. Compared to the control, an increase of only 3-5% in the quantity of peroxides could be observed in the fraction of "compound lipids". The

Card 2/4

SOV/20-126-1-53/62

Fermentative Oxidation of Lipids in Plants Exposed to Ionizing Radiation

contents in this case changes however, analogically to that of "free lipids". Furthermore it can be seen from table 1 that the absolute quantity of peroxides in one culture is not always the same. In order to solve the problem of the nature of peroxide development in leaves, the lipoxidase of the sprouts was inactivated by means of steam. Table 2 shows the results. As can be seen from them, the radiation treatment of the leaves in which lipoxidase had been inactivated by means of steam, does not cause an increase of the amount of peroxide. On the contrary, the destruction of the lipids through steam is continued by radiation. The authors therefore arrive at the conclusion, that the development of peroxide is a fermentative process taking place under the participation of lipoxidase (Refs 5,6). The results obtained justify the statement that under the influence of ionizing radiation a fermentative oxidation of the lipids takes place. The peroxide content is thus increased. These peroxides are toxic and have a specific physiological effect. Their identification and the investigation of their influence and of their quantities are of great interest. There are 2 tables and 10 references, 8 of which are

Card 3/4

SOV/20-126-1-53/62

Fermentative Oxidation of Lipids in Plants Exposed to Ionizing Radiation

Soviet.

ASSOCIATION: Institut biokhimii im. A. N. Bakha Akademii nauk SSSR (Institute of Biochemistry imeni A. N. Bakh of the Academy of Sciences, USSR)

PRESENTED: January 24, 1959, by A. I. Oparin, Academician

SUBMITTED: January 22, 1959

Card 4/4

BORISOVA, I. G.

23

PHASE I BOOK EXPLOITATION SOV/5628

Akademiya nauk SSSR. Institut biologicheskoy fiziki

Rol' perekisey i kisloroda v nachal'nykh stadiyakh radiobiologicheskogo effekta (Role of Peroxides and Oxygen During Primary Stages of Radiobiological Effects) Moscow, 1960. 157 p. 4,500 copies printed.

Responsible Ed.: A. M. Kuzin, Professor; Ed. of Publishing House: K. S. Trinchin; Tech. Ed.: P. S. Kashina.

PURPOSE : This collection of articles is intended for scientists in radiobiology and biophysics.

COVERAGE: Reports in the collection deal with the role of peroxides and oxygen in the primary stages of a radiobiological effect. They were presented and discussed at a symposium held December 25-30, 1958, organized by the Institut biofiziki AN SSSR, (Institute of Biophysics, AS USSR). Twenty-eight Moscow scientists, radiobiologists, radiochemists, physicists, and

Card-1/5-

23

Role of Peroxides and Oxygen (Cont.)

SOV/5628

physical chemists took an active part in the symposium. Between the time of its conclusion and the publication of the present book some of the materials were expanded. In addition to the authors the following scientists participated in the discussion: L. A. Tummerman, V. S. Tongur, G. M. Frank, Yu. A. Kriger, E. Ya. Grayevskiy, N. N. Demin, B. N. Tarusov, and I. V. Vereshchenskiy. References follow individual articles.

TABLE OF CONTENTS:

Kuzin, A. M. [Institut biologicheskoy fiziki AN SSSR - Institute of Biophysics, AS USSR]. Role of Formation of Peroxides During the Action of Radiation on Biological Specimens	3
Bakh, N. A. [Institut elektrokhimii AN SSSR - Institute of Electrochemistry, AS USSR]. Formation of Organic Peroxides Under the Action of Radiation	9
Dolin, P. I. [Institute of Electrochemistry, AS USSR]. Lifetime of Intermediate States Arising During the Action of Radiation on Aqueous Solutions	20

Card-2/5.

Role of Peroxides and Oxygen (Cont.)

SOV/5628

Shal'nov, M. I. Branching Chain Reactions of the Radiation
Aftereffect in a Warm-Blooded Organism 72

Budnitskaya, Ye. V., and I. G. Borisova [Institute of Bio-
chemistry imeni A. N. Bakh, AS USSR]. Formation of Peroxides
and Activation of Ferment Oxidation of Lipids in Plants Under
Radiation Effect 85

Malina, Yu. F., and M. I. Tseytlin [Institut eksperimental'noy
biologii AMN SSSR - Institute of Experimental Biology AMN USSR].
Effect of Irradiated Aqueous NaCl Solutions on the Viscosity
of Tissue Nucleoproteids 91

Blyumenfel'd, L. A. [Institut khimicheskoy fiziki AN SSSR -
Institute of Chemical Physics, AS USSR]. Problem of Identi-
fication of Free Radicals by the Electron Paramagnetic Reso-
nance Method 97

Kuzin, A. M., L. P. Kayushin, I. K. Kolomiytseva, and K. M.
L'vov [Institute of Biophysics, AS USSR]. Postirradiation
Study of Free Radicals of Certain Organic Peroxides by the
Card 4/5

BUDNITSKAYA, Ye.V.; MASLOV, N.M.; BORISOVA, I.G.; PASYNSKIY, A.G.

Impedance method of studying structural changes in plant tissues
caused by ionizing radiation. Radiobiologiya 1 no.1:37-41 '61.
(MIRA 14:7)

1. Institut biokhimii im. A.N.Bakha AN SSSR i Institut biologicheskoy
fiziki AN SSSR, Moskva.

(PLANTS, EFFECT OF RADIATION ON)
(ELECTROPHYSIOLOGY OF PLANTS)

BUDNITSKAYA, Ye.V.; BORISOVA, I.G.

Oxidative conversion of lipids in leaves of irradiated plants.
Biokhimiia 26 no. 1:142-147 Ja-F '61. (MIRA 14:2)

1. Institute of Biochemistry, Academy of Sciences of the U.S.S.R.,
Moscos.

(LIPID METABOLISM) (PLANTS, EFFECT OF RADIATION ON)

BORISOVA, I.G.; BUDNITSKAYA, Ye.V.

Methods for quantitative paper chromatography of unsaturated
higher fatty acids. Biokhimiia 28 no. 3:497-500 My-Je '63.
(MIRA 17:2)

1. Institute of Biochemistry, Academy of Sciences of the U.S.S.R.,
Moscow.

BUDNITSKAYA, Ye.V.; BORISOVA, I.G.; ALEKSANDROVA, N.B.

Change in the level of nonsaturated higher fatty acids of the
"free lipid" fraction from the leaves of irradiated plants and
a study of its toxic properties. Biokhimiia 29 no.5:930-
935 J1-Ag '64. (MIRA 18:11)

1. Institut biokhimii imeni Bakha AN SSSR, Moskva.

15.2120

28624 S/019/61/000/017/037/068
A152/A126

AUTHORS: Borisova, I.I., Brachovskikh, S.M., Ryabov, V.A., Orzhevskiy,
V.I., Bromley, P.V., Viktorova, Yu.N., and Kulikova, Ye.N.

TITLE: A method of changing the properties of glass products

PERIODICAL: Byulleten' izobreteniy, no. 17. 1961, 47

TEXT: Class 32b, 650. No. 140966 (683027/29 of October 22, 1960).
A method of changing the properties of glass products, e.g. strength, color, electric conductivity, by working their surfaces with the corresponding evaporating or disintegrating chemical substances, differing from others in that, in order to simplify the technology involved, glass products are treated with chemical substances at 550-750°C, either in the glass-forming machine during the shaping, drawing, or rolling of glass products, or right after the completion of shaping, in the course of annealing or transporting same.

X

Card 1/1

BORISOVA, I.I.; RYABOV, V.A.

Basic physicochemical processes in modern methods of silvering
glass. Stek. i ker. 18 no.12:8-12 D '61. (MIRA 16:8)

(Mirrors)

32369

S/072/62/000/001/002/003
B105/B110

15 2120

AUTHORS: Brekhovskikh, S. M., Borisova, I. I.

TITLE: Stability of metallic oxide films on glass to the effect
of ionizing radiation

PERIODICAL: Steklo i keramika, no. 1, 1962, 4 - 6

TEXT: The radiation stability was investigated for metallic oxide films on glass which impart new properties to the glass: a predetermined electrical conductivity, selective light permeability, reflection, increased mechanical strength, chemical stability, hydrophobic nature. The aerosol-base films were mostly prepared by spraying-on solutions or salt vapors at temperatures close to the softening temperature of the glass. The radiation-optical stability was investigated for metallic oxide films developing during the pyrolysis of acetates of cadmium, cobalt and nickel, nitrates of lead and silver, chlorides of aluminum, vanadium, bismuth, iron, manganese, copper, strontium, titanium, chromium, zinc, and zirconium. The films were applied onto refractory 13-B(13-v) glass which contained 0.6% by weight of cerium oxide and was not discolored by γ -rays of Co^{60} (doses
Card 1/3

32369

S/072/62/000/001/002/003

B105/B110

Stability of metallic oxide...

of up to $10^5 - 10^6$ r). The glass is noticeably colored at 10^7 and $6.8 \cdot 10^7$, and its transparency decreases from 86.7% to 70.7 and 48.4%, respectively. The effect of γ -rays on the electrical conductivity of metallic oxide coatings was also determined, window glass also being used as a base. The films were applied at glass temperatures of $650 - 850^\circ\text{C}$, and irradiated by means of Co^{60} with 10^3 , 10^5 , and $6.8 \cdot 10^7$ r, neither color nor transparency of any specimen changing at 10^3 and 10^5 r, with the exception of the coating developing during pyrolysis of silver nitrate. Discoloring and decrease in transparency set in during irradiation with $6.8 \cdot 10^7$ r. Investigations with higher radiation doses ($10^9 - 10^{10}$ r) and research into the stability of films to γ -neutron irradiation are mentioned as being of interest. There are 2 tables and 8 referendes: 7 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: Y. Paymal, M. Bonnaud, P. Clerc. J. Am. Cer. Soc. 43, no. 8, 1960.

Card 2/3

Stability of metallic oxide...

30369

S/072/62/000/001/002/003

B105/B110

Table 2. Spectral light permeability of silver nitrate coatings.

Legend: (a) Wavelength in mμ; (b) spectral light permeability; (c) before irradiation; (d) after irradiation.

(a) Длина волны в мμ	Спектральное свето- пропускание (b)			(a) Длина волны в мμ	Спектральное свето- пропускание (b)		
	(c) до облу- чения	после облуче- ния (d)			(c) до облу- чения	после облуче- ния (d)	
		10 ³ p	10 ⁴ p			10 ³ p	10 ⁴ p
320	0	0	0	520	55,0	46,0	51,0
340	0	0	0	550	57,5	47,2	52,8
350	7,0	6,1	5,1	600	59,3	49,0	54,5
360	23,0	20,6	17,9	650	61,0	50,0	55,1
370	37,0	32,0	29,2	700	60,0	48,5	53,0
380	44,0	38,5	36,9	750	59,0	48,1	53,5
390	47,0	40,5	41,0	800	57,2	47,3	53,0
400	48,1	42,0	43,0	850	55,0	46,0	51,0
420	48,9	42,0	44,2	900	54,0	44,0	47,3
440	47,5	41,0	44,0	950	52,8	42,9	47,4
460	49,0	41,1	45,2	1000	52,0	42,0	46,0
480	53,0	44,8	49,0	1100	52,0	42,0	46,0
500	54,0	45,0	49,2				

Card 3/3

L 19850-65 EWP(e)/EWT(m)/EPA(s)-2/EPF(c)/EPF(n)-2/EPR/EPA(w)-2/EPA(bb)-2/
EWP(b)/EWP(t) Pab-10/Pq-4/Pr-4/Pe-4/Pt-10/Pn-4 ASD(a)-5/ESD(t) JD/AM/
WH

CESSION NR: AR4048154

S/0081/64/000/011/M012/M013

SOURCE: Ref. zh. Khimiya, Abs. 11M105

AUTHOR: Borisova, I.I.

TITLE: The effect of a cobaltic oxide coating on the microscopic hardness of glass ✓

CITEL SOURCE: Steklo. Inform. materialy Gos. n.-i. in-ta stekla, no. 4(121), 1963, 54-57

KEY TAGS: glass hardness, glass strength, glass surface property, window glass, colored glass, cobalt oxide film

TRANSLATION: The microscopic hardness of window glass from the Ashkhabadskiy stekol'nyy kombinat imeni V.I. Lenina (Ashkhabad Glass Combine) and of the same glass with a cobaltic oxide coating were compared. A variable index of surface hardness was observed in samples of glass from a single batch, despite analogous conditions of production, treatment and storage. Beginning with a thickness of 200A, a cobaltic oxide film increases the surface hardness of window glass. In view of the fact that the condition of the surface determines, to a significant extent, the variation in mechanical properties

Card 1/2

L 19850-65

ACCESSION NR: AR4048154

of the glass with time, the presence of a cobaltic oxide film should prevent the formation and development of surface defects and should thus facilitate preservation of the strength of the glass under actual conditions of production, treatment, storage, transport and use. Author's summary.

SUB CODE: MT

ENCL: 00

Card 2/2

S/058/63/000/001/067/120

A160/A101

AUTHORS: Ryabov, V. A., Nayman, I. M., Borisova, I. I., Grinevetskaya, S. N.,
Viktorova, Yu. N., Gayevaya, L. A.

TITLE: New light filters for the protection of the eyes during production

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 83, abstract 1D602
("Steklo. Byul. Gos. n.-i. in-ta stekla", no. 1 (110), 1961, 72 -
81)

TEXT: A description is given of the technological process of producing
neutral and selective light filters designed mainly for controlling metallurgical
processes. The light filters are made by applying oxide films from metal salts
of the 4, 5 and 6th period of the periodic system of elements by the aerosols
method. Presented are the characteristics of the light filters with oxide layers
from cobalt, iron, lead + antimony and lead + antimony + iron.

Yu. Kutev

[Abstracter's note: Complete translation]

Card 1/1

44801-65 ENG(j)/EWP(e)/EPA(s)-2/EWT(m)/EPF(s)/EWP(i)/EWP(v)/EPR/EWP(j)/
EWP(t)/EPA(bb)-2/EWP(h)/FWA(i) Pq-4/Pq-4/Pr-4/Pr-4/Pt-7/Ptd IJP(c)
RM/WH/WW/JD/HW

ACCESSION NR: AP5012032

UR/0072/65/000/005/0015/0019

AUTHOR: Borisova, I.I.; (Engineer); Botvinkdn, O.K. (Doctor of chemical sciences)

TITLE: Study of the conditions of formation of a cobalt oxide coating on glass

SOURCE: Steklo i keramika, no. 5, 1965, 15-19

TOPIC TAGS: coated glass, cobalt oxide coating, cobalt oxide deposition

ABSTRACT: The article is devoted to a study of certain physicochemical relationships governing the deposition of a cobalt oxide coating on glass in the manufacture of glass having protective properties against solar radiation. Attempts were made to determine the structural characteristics of the coating. Aqueous and water-alcohol solutions of cobalt acetate were sprayed in the form of an aerosol onto cold glass substrates; the film was formed at 200-900C, and the samples were subjected to analysis by x-ray diffraction. At 400-800C the film consists of Co_3O_4 ; above 750C, Co_3O_4 partially dissociates to form CoO . The dependence of the deposition of Co_3O_4 on the time of the aerosol treatment was found to be linear. The dependence of the amount of Co_3O_4 deposited on the temperature, of glass, concentration of the solution, and pH of the solution was established. A formula was derived for the thickness of the Co_3O_4 coating: $h = \frac{P \times 10^7}{dS}$, where h is the thickness

Cord 1/2

L 44801-65

ACCESSION NR: AP5012032

of the coating in μm , P is the weight of the coating in g, d is the density of Co_3O_4 , taken as 6.07, and S is the surface area of the glass in cm^2 . It was established empirically that a coating 100 μm thick corresponds to the optimum parameters from the standpoint of practical applications. Orig. art. has: 6 figures and 1 formula.

ASSOCIATION: Institut stekla (Institute of Glass)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, IC

NO REF SOV: 005

OTHER: 001

moB
Card 2,2

Borisova, I. I.

129-4-8/12

AUTHORS: Venkov, B. V., Borisova, I. I., and Noskova, M.A.
TITLE: Bright isothermal hardening of cold coiled springs
made of the steel 60S2A. (Svetlaya izotermicheskaya
zakalka pruzhin kholodnoy navivki iz stali 60S2A).
PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, No.4,
pp. 44-45 (USSR).

ABSTRACT: At present heavily loaded springs are treated in
accordance with a long cycle comprising hardening,
tempering in saltpetre, boiling and sand blasting.
Therefore, introduction of bright isothermal hardening
into spring manufacture would be highly effective from
the economic point of view. The aim of the work described
in this paper was to determine the possibilities of
application of bright isothermal hardening of cold coiled
springs made of wire of up to 6 mm dia. Heating prior
to hardening was effected in a electrode salt bath
(NaCl) in which specimens of the steel 60C2A were heated
to 350°C and then rapidly transferred into an alkali
bath consisting of 63% KOH and 37% NaOH. After holding
for a certain duration in the isothermal bath, the
specimens were finally quenched in water. The experi-
ments have shown that optimum results are obtained when

Card 1/3

Bright isothermal hardening of cold coiled springs made of the steel 60S2A. 129-4-8/12

hardening in an isothermal medium with a temperature of 270°C and a holding time of twenty minutes; a higher hardening temperature does not ensure the required elasticity of the metal and leads to settling of the springs. A holding time below twenty minutes does not ensure full decomposition of the austenite, whilst increasing the holding time above twenty minutes has practically no further influence on the properties of the springs. The structure of the steel after optimum heat treatment consists of acicular troostite and a slight quantity of residual austenite (as shown in a photo). The characteristics of the steel 60C2A after isothermal hardening proved to be superior to the characteristics obtained after heat treatment according to the conventionally used heat treatment cycle; the respective data are entered in Table 1, p.44. A small batch of springs from 5 mm dia. wire were treated according to the here described regime. The results of comparative tests of these springs with those produced by means of the currently used heat treatment cycle using wire produced from the same melt are entered in Table 2, p.44.

Card 2/3

129-4-8/12

Bright isothermal hardening of cold coiled springs made of the steel 60S2A.

The investigations have shown that after isothermal hardening springs are liable to a greater degree of settling due to over-squeezing, which is the consequence of an increased content of residual austenite. However, after clamping none of the springs had a settling exceeding 1%, which can be considered a good result since a maximum of 3% is the specified standard. After isothermal hardening, the springs had a bright silvery surface; after washing and passivation, these springs were phosphated. As regards the quality of the coating, the experimental batch of springs did not differ from sand blasted specimens. Special tests showed that the corrosion stability of these springs is fully satisfactory. The carried out work showed that introduction of the bright isothermal hardening in spring manufacture can reduce a number of laborious operations, bringing about improvement in the conditions of labour and reduction in the production costs.

There are 1 figure and 2 tables.

Card 3/3

(Note: This is a complete translation except for the tables and figure caption).

AVAILABLE; Library of Congress.

SHVETSOVA-SHILOVSKAYA, K. D.; MEL'NIKOV, N. N.; BORISOVA, I. M.; NOVIKOV
Ye.G.

Organic insectofungicides. Part 76: Synthesis of some new
derivatives of carbamic acid. Zhur. ob. Khim. 34 no.6:1779-1780
(MIRA 17:7)
Je '64.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh
sredstv zashchity rasteniy.

BORISOVA, I.V.

~~_____~~
Biology of the Phlomis L. species of northern Kazakhstan. Bot.
zhur. 41 no.9:1352-1355 S '56. (MLRA 9:11)

1. Botanicheskiy institut imeni V.L.Komarova Akademii nauk
SSSR, Leningrad.
(Kazakhstan-- Mint)

BORISOVA, I.V.; ISACHENKO, T.I.; RACHKOVSKAYA, Ye.I.

Forest steppe in northern Kazakhstan. Bot. zhur. 42 no.5:677-690
My '57. (MLBA 10:6)

1. Botanicheskiy institut im. V.I. Komarova Akademii nauk SSSR,
Leningrad.

(Kazakhstan--Photogeography)

BORISOVA, I.V.

BORISOVA, I.V.: ISACHENKO, T.I.; RACHKOVSKAYA, Ye.I.

Principal phytogeographical features of the vegetation of
northern Kazakhstan. Izv.Vses.geog.ob-va 89 no.4:308-321
Jl.-Ag '57. (MIRA 10:10)
(Kazakhstan--Phytogeography)

BORISOVA, I.V.

~~_____~~
Biology of *Potentilla humifusa* Willd. Bot. zhur. 44 no.4:563-568
Ap '59. (MIRA 12:10)

1. Botanicheskiy institut im. V.L. Komarova Akademii nauk SSSR,
Leningrad.

(Cinquefoil)

BORISOVA, I.V.

Principal life forms of dicotyledonous herbaceous perennials in
steppe phytocoenoses of the Northern Caucasus. Bot.zhur. 45
no.1:19-33 Ja '60. (MIRA 13:5)

1. Botanicheskiy institut im. V.L.Komarova Akademii nauk
SSSR, Leningrad.
(Caucasus, Northern--Steppe Flora)

ISACHENKO, T.I., BORISOVA, I.V., KALININA, A.V., KARAMYSHEVA, Z.V.,
RACHKOVSKAYA, Ye.I.

Compiling the vegetation map of northern Kazakhstan. Bot. zhur.
45 no.5:703-706 My '60. (MIRA 13:7)

1. Botanicheskiy Institut im. V.L. Komarova Akademii nauk SSSR,
Leningrad.

(Kazakhstan--Phytogeography--Maps)

BORISOVA, I. V., CAND BIO SCI, ^M PRINCIPAL VITAL FORMS OF
dicotyledonous
~~DICOTYLEDON~~ PERENNIAL HERBACEOUS PLANTS OF ~~THE~~ PRAIRIE PHY-
TOCENOSES OF NORTHERN KAZAKHSTAN. " LENINGRAD, 1960. (MIN OF
HIGHER AND SEC SPEC ED RSFSR. LENINGRAD ORDER OF LENIN
STATE UNIV IM A. A. ZHDANOV). KL, 2-61, 203).

-71-

BORISOVA, I.V., kand. ekonom. nauk; KISLOVA, T.A., dots.; MAKAROV,
N.A., starshiy prepodavatel'; POLYANSKIY, Ye.V., dots.;
GRINSHPON, F.O., red.; MALYAVKO, A.V., tekhn. red.

[Economics, organization, and planning in forestry] Ekonomika,
organizatsiia i planirovanie lesnogo khoziaistva. L'vov, Izd-vo
L'vovskogo univ., 1961. 302 p. (MIRA 15:3)
(Forests and forestry--Economic aspects)

BORISOVA, I.V.

Biology and principal forms of life of the perennial
dicotyledonous herbaceous plants in the steppe phytocoenoses
of northern Kazakhstan. Trudy Bot. inst. Ser. 3 no.13:54-132
'61. (MIRA 15:1)

(Kazakhstan--Grasses)

BORISOVA, I.V.; ISACHENKO, T.I.; KALININA, A.V.; KARAMYSHEVA, Z.V.;
RACHKOVSKAYA, Ye.I.

List of plants according to their forms of life and ecologic
and phytocoenological type. Trudy Bot. inst. Ser. 3 no.13:487-514
'61. (MIRA 15:1)
(Kazakhstan--Botany--Classification)

BORISOVA, I.V.

Biologic and morphologic characteristics of herbaceous cushion plants
in northern Kazakhstan. Probl. bot. 6:336-345 '62.

(MIRA 16:5)

(Kazakhstan—Pinks)

(Kazakhstan—Gypsophila)

(Botany—Ecology)

REMEZOV, N.P. [deceased]; RODIN, L.Ye.; BAZILEVICH, N.I.; Prinimali uchastiye: ALEKSANDROVA, V.D.; BORISOVA, I.V.; BYKOVA, L.N.; ZONNA, S.V.; KARPOVA, V.G.; MINA, V.N.; NECHAYEVA, N.T.; PONYATOVSKAYA, V.M.; REMEZOVA, G.L.; SAMOYLOVA, Ye.M.; SMIRNOVA, K.M.; SUKHOVERKO, R.V.

Methodological instructions for studying the biological cycle of ash substances and nitrogen of terrestrial plant communities in the main natural zones of the temperate zone. Bot. zhur. 48 no.6:869-877 Je '63. (MIRA 17:1)

1. Botanicheskiy institut imeni V.I. Komarova AN SSSR, Leningrad i Pochvennyy institut imeni V.V. Dokuchayeva Ministerstva sel'skogo khozyaystva SSSR, Moskva.

BESPALOVA, Z.G.; BORISOVA, I.V.

Phenological observations in steppe communities with the
consideration of the morphology and biology of plants. Bot.
zhur. 48 no.9:1271-1281 S '63. (MIRA 16:11)

1. Botanicheskiy institut imeni Komarova AN SSSR,
Leningrad.

BECHKOVA, I.G.

Effects of late spring frost on the development of some plants
in the desert steppes of central Kazakhstan. Bot. zhur. 50
no. 5:1004-697 My '65. (MIRA 18:10)

I. Botanicheskii institut imeni Komarova AN SSSR, Leningrad.

ROZLOVSKIY, A. I.; BORISOVA, I. Yu.

Explosionproof system for liquid-phase oxidation of toluol by
atmospheric oxygen. Khim prom no. 3:199-201 Mr '64.
(MIRA 17:5)

ONUSHKIN, V.; BORISOVA, K., red.; SHIKIN, S., tekhn.red.

[The "atomic business" of American monopolies] "Atomnyi
biznes" amerikanskikh monopolii. Moskva, Izd-vo sotsial'no-
ekon.lit-ry, 1960. 142 p. (MIRA 14:3)
(United States--Atomic power industry)

BORISOVA, K., red.; MOSKVINA, R., tekhn.red.

[Labor organization in the industry of the Federal Republic of Germany; based on materials of the Study Group of the Association for Labor Research (REFA)] Organizatsiia truda v promyshlennosti ~~FRG~~; materialy REFA. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1960. 383 p.

(MIRA 14:4)

1. Moscow. Nauchno-issledovatel'skiy institut truda.
(Germany, West--Labor and laboring classes)
(Germany, West--Production standards)

ZOTOV, German Mikhaylovich; BORISOVA, K., red.; DARONYAN, M., mlad-shiy red.; NOGINA, N., tekhn. red.

[Retail trade in the United States] Roznichnaia trgovlia v SShA. Moskva, Izd-vo sotsial'no-ekon. lit-ry, 1961. 164 p.
(MIRA 15:2)

(United States--Retail trade)

MOSHENSKIY, Mark Grigor'yevich; BORISOVA, K., red.; KIRSANOVA, I.,
mladshiy red.; CHEPELEVA, O., tekhn. red.

[Wage forms and systems in the industry of capitalist countries]
Formy i sistemy zarabotnoi platy v promyshlennosti kapitalisti-
cheskikh stran. Moskva, Izd-vo sotsial'no-ekon. lit-ry, 1961.
261 p. (MIRA 15:1)

(Wage payment systems)

IN'KOV, Yuriy Ivanovich; BORISOVA, K., red.; NAZAROVA, V., red.; KIRSANOVA, I.,
mladshiy red.; ULANOVA, L., tekhn.red.

[Radioelectronics in the service of the military monopolies of
the U.S.A.] Radioelektronika na sluzhbe voenrykh monopolii
SShA. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1962. 124 p.

(MIRA 15:4)

(United States—Electronic industries)

BORISOVA, K.B.

Tachinid fly *Pexopsis capitata* Mesnil (Diptera, Larvaevoridae)
a parasite of the Far Eastern June beetle *Holotrichia diomphalia*
Bates (Coleoptera, Scarabaeidae). Ent.oboz. 40 no.3:584-594
'61. (MIRA 15:3)

1. Zoologicheskiy institut AN SSSR, Leningrad.
(Tachinid flies) (Parasites--Insects)

BORISOVA, K.B.

Worms of the Forest and the Field

Destructive activity of the hairy measuring worm (*Biston hirtarius* Cl.) of bottom-land forests in the southern Ural foothills, and its insect predators. Trudy Zool inst. 16:457-464 '54. (MLA 8:6)
(West Kazakhstan Province--Moth) (Parasites--Trees)